CLAIMS:

5

10

15

- 1. A circuit arrangement for an MR apparatus, having a resonant circuit which is formed by an MR receiving coil (L1) and a capacitor (C1), and having an electronic control circuit (S) for switching the resonant circuit between two or more operating modes, wherein the electronic control circuit (S) is connected to a receiving device (L2) for wireless reception of a high-frequency electromagnetic control signal.
- A circuit arrangement as claimed in claim 1, wherein the receiving device is formed by the MR receiving coil itself, and wherein switching over of the resonant circuit is controllable by means of the control circuit in dependence on the amplitude of the high-frequency signal present at the MR receiving coil.
- 3. A circuit arrangement as claimed in claim 1, wherein the receiving device is formed by an additional resonant circuit which is tuned to a different resonant frequency from the resonant circuit formed by the MR receiving coil and the associated capacitor.
- 4. A circuit arrangement as claimed in claim 3, wherein the additional resonant circuit is connected to a rectifier circuit for generating a low-frequency switching signal.
- 5. A circuit arrangement as claimed in any one of claims 1 to 4, wherein the control circuit comprises a time-delay circuit that is constructed such that the resonant circuit formed by the MR receiving coil and the associated capacitor, upon receipt of the control signal, is switched over into an activated or de-activated operating mode, and thereafter remains in that operating mode for a time interval of pre-determinable duration.
- A circuit arrangement as claimed in claim 1, wherein the receiving device is constructed for receiving radio signals of a radio control.
 - 7. MR apparatus having a main field coil (1) for generating a substantially homogeneous, static magnetic field in an examination volume, a transmitting coil (8) for

generating high-frequency fields in the examination volume, an MR receiving coil (10) for receiving MR apparatus signals from the examination volume, a computer unit (6) for controlling the MR apparatus, and having a circuit arrangement as claimed in any one of claims 1 to 6.

9

PCT/IB2004/052536

5

10

WO 2005/057232

- 8. An MR method for generating an image of an examination object using an MR apparatus as claimed in claim 7, wherein the image is reconstructed from MR signals that are received from the examination volume after input of a high-frequency pulse, and wherein the resonant circuit formed by the MR receiving coil (L1) and the associated capacitor (C1) is switched by additional generation of a high-frequency electromagnetic control signal between an activated and a de-activated operating mode, such that the resonant circuit is in the de-activated operating mode during input of the high-frequency pulse.
- 9. An MR method as claimed in claim 8, wherein the control signal has a different frequency from the high-frequency pulse and wherein the control signal is generated before or after the high-frequency pulse.
- 10. Computer program for an MR apparatus as claimed in claim 7, wherein an MR method as claimed in claim 8 or 9 is implemented by the computer program on the computer unit of the MR apparatus.